

CLAIMS

Amend the claims as follows.

1. – 22. (Canceled)

23. (Currently Amended) A system comprising:

a language analysis module configured to parse a query into elements and to associate one or more annotations with respective ones of at least some of the elements, a type of each of the annotations being either canonical or conceptual;

a rules engine coupled to the language analysis module to receive the elements and the annotations, the rules engine configured to perform a comparison of a condition of a rule from a rules dictionary against the elements and the annotations, and to selectively enable an action of the rule based upon a result of the comparison; and

a response generator coupled to the rules engine and configured to display information in response to the action; ~~and~~

wherein the action when enabled selects one of one or more information retrieval technologies to produce the information, and wherein the selected information retrieval technology is configured to search content storage via a semantic index to produce at least a portion of the information; and

wherein the search of the content storage is subsequent to the comparison of the condition of the rule against the elements and the annotations.

24. (Previously Presented) The system of claim 23, further comprising matching ones of the elements against concepts stored in a multi-layered concept repository to produce the conceptual annotations.

25. (Previously Presented) The system of claim 23, wherein the action specifies one or more of the elements and the annotations as keys used to access the semantic index.

26. (Currently Amended) The system of claim 23, further comprising associating, via a regular expression language specifying the condition of the rule, a plurality of the elements and

the annotations with a concept in a multi-layered concept repository;~~and~~ wherein the action specifies the concept as a key used to access the semantic index.

27. (Currently Amended) The system of claim 26, wherein:
~~wherein~~ the rule is one of a plurality of rules, each of the rules having a respective condition and a respective action;
~~wherein~~ the selected information retrieval technology is a first selected information retrieval technology, and the at least a portion of the information is a first portion of the information; and
~~wherein~~ a second one of the actions when enabled selects a second distinct one of the information retrieval technologies, and the second selected information retrieval technology is configured to supply a managed answer as a second portion of the information.

28. (Previously Presented) The system of claim 27, wherein a third one of the actions when enabled provides a bias requirement, and wherein the response generator is configured to selectively display the information based on the bias requirement.

29. (Previously Presented) The system of claim 28, wherein the response generator is configured to display the first portion of the information in a first portion of a screen, and to display the second portion of the information in a second separate portion of the screen.

30. (Previously Presented) The system of claim 27, wherein the managed answer is specified via the one of the rules having the second action.

31. (Previously Presented) The system of claim 23, wherein the rules engine is further configured to selectively enable the action based on comparing peripheral information distinct from the query against a business condition of the rule.

32. (Previously Presented) The system of claim 23, wherein the language analysis module is further configured to process the content storage to form the semantic index.

33. (Currently Amended) A method comprising:

searching, by a computer, content storage using a key to a semantic index;

prior to the searching of the content storage:

receiving a query;

parsing a the query into elements;

associating one or more annotations with respective ones of at least some of the elements;

comparing respective conditions of each of a plurality of rules from a rules dictionary against the elements and the annotations;

selectively firing a respective action of each of the plurality of rules based on respective results of the ~~comparing~~ comparison; and

~~in response to at least one of the firing actions, operating one or more information retrieval technologies to produce respective information;~~

matching, by at least one of the rules, a plurality of the elements and the annotations to a concept representing an intent of the query, wherein each of the plurality of the elements and the annotations corresponds to one or more words of the query, and wherein the concept is used as the key to the semantic index used in the searching of the content storage;

~~searching content storage using the concept as a key to a semantic index as a part of one of the information retrieval technologies; and~~

in response to the selective firing of at least one of the respective actions of at least one of the rules, operating one or more information retrieval technologies to produce respective information, wherein the one or more information retrieval technologies include the searching of the content storage; and

displaying the information.

34. (Previously Presented) The method of claim 33, wherein the matching is via a regular expression language.

35. (Previously Presented) The method of claim 34, wherein the matching determines if at least one of the plurality of the elements and the annotations shares a common ancestor in a multi-layered concept repository with a question example of the at least one of the rules.

36. (Previously Presented) The method of claim 35, wherein the one of the information retrieval technologies is a first one of the information retrieval technologies, and further comprising:

in response to a first one of the firing actions, operating the first information retrieval technology;

in response to a second one of the firing actions, operating a second distinct one of the information retrieval technologies; and

providing, via the second one of the information retrieval technologies, a managed answer.

37. (Previously Presented) The method of claim 36, wherein the displaying of the information is selectively based on at least some of the firing actions.

38. (Currently Amended) The method of claim 37, further comprising the providing of the managed answer by the at least some of the firing actions a bias requirement, and wherein the displaying of the information is selectively based on the bias requirement.

39. (Previously Presented) The method of claim 33, wherein the comparing is via a regular expression language.

40. (Currently Amended) The method of claim 39, wherein the associating is, at least in part, via a multi-layered concept repository producing conceptual ones of the annotations[[:]].

41. (Previously Presented) The method of claim 40, wherein at least one of the firing actions specifies one or more of the elements and the annotations as additional keys used for the searching of the content storage.

42. (Previously Presented) The method of claim 33, further comprising:
determining a respective relevancy of each of at least some of the firing actions; and
selectively performing each of the at least some of the firing actions based upon the
respective relevancy.

43. (Previously Presented) The method of claim 42, wherein the respective relevancy
of a particular one of the firing actions is based on the ones of the elements and the annotations
that contributed to the respective results of the comparing that selectively fired the particular
firing action.

44. (Currently Amended) A computer readable medium comprising instructions that:
~~instructions that~~ parse a query into elements;
~~instructions that~~ associate one or more annotations with respective ones of at least some
of the elements;
~~instructions that~~ compare respective conditions of each of a plurality of rules against the
elements and the annotations;
~~instructions that~~ selectively fire a respective action of each of the plurality of rules based
on respective results of the ~~comparing~~ comparison;
~~instructions that~~, in response to at least one of the firing actions, operate one or more
information retrieval technologies to produce respective information;
~~instructions that~~ match, via at least one of the rules, a plurality of the elements and the
annotations to a concept representing an intent of the query, wherein each of the plurality of the
elements and the annotations corresponds to one or more words of the query;
~~instructions that~~ search content storage using the concept as a key to a semantic index as
a part of one of the information retrieval technologies; and
~~instructions that~~ display the information.

45. (Currently Amended) The computer readable medium of claim 44, wherein the
~~instructions that match~~ matching includes instructions that use a regular expression language.

46. (Currently Amended) The computer readable medium of claim 45, wherein the ~~instructions that match~~ matching includes instructions that determine if at least one of the plurality of the elements and the annotations shares a common ancestor in a multi-layered concept repository with a question example of the at least one of the rules.

47. (Currently Amended) The computer readable medium of claim 46, wherein the one of the information retrieval technologies is a first one of the information retrieval technologies, and further comprising instructions that:

~~instructions that~~, in response to a first one of the firing actions, operate the first information retrieval technology;

~~instructions that~~, in response to a second one of the firing actions, operate a second distinct one of the information retrieval technologies; and

~~instructions that~~ provide, via the second one of the information retrieval technology, a managed answer.

48. (Currently Amended) The computer readable medium of claim 47, wherein the ~~instructions that display~~ displaying of the information operates selectively based on at least some of the firing actions.

49. (Currently Amended) The computer readable medium of claim 48, further comprising instructions that provide, via the at least some of the firing actions, a bias requirement, and wherein the ~~instructions that display~~ displaying of the information operates selectively based on the bias requirement.

50. (Currently Amended) The computer readable medium of claim 44, wherein the ~~instructions that compare~~ comparison includes instructions that use a regular expression language.

51. (Currently Amended) The computer readable medium of claim 50, wherein the ~~instructions that associate~~ associating includes instructions that use a multi-layered concept repository to produce conceptual ones of the annotations[[:]].

52. (Previously Presented) The computer readable medium of claim 51, wherein at least one of the firing actions specifies one or more of the elements and the annotations as additional keys used for the searching of the content storage.

53. (Currently Amended) The computer readable medium of claim 44, further comprising instructions that:

~~instructions that~~ determine a respective relevancy of each of at least some of the firing actions; and

~~instructions that~~ selectively perform each of the at least some of the firing actions based upon the respective relevancy.

54. (Currently Amended) The computer readable medium of claim 53, wherein the respective relevancy of a particular one of the firing actions is based on the ones of the elements and the annotations that contributed to the respective results of the ~~comparing~~ comparison that selectively fired the particular firing action.

55. (New) The method of claim 33, further comprising:
prior to receiving the query, establishing the content storage during an indexing mode by importing structured content and/or unstructured content into the content storage;
using the actions selectively fired by the rules to define a search criteria including the concept; and
using the search criteria when searching the content storage as at least a part of the one or more information retrieval technologies.

56. (New) The method of claim 33, further comprising:
specifying weightings via the actions selectively fired by the rules;
determining relevance to the query of individual documents in the information according to the weightings;
displaying the documents according to the relevance; and

wherein the rules identify both the concept representing the intent of the query to be addressed in the information and the weightings determining the relevance of the documents in the information.

57. (New) The method of claim 33, wherein the one or more information retrieval technologies include one or more of keyword searching, document-level relevance-based searching, and ontology-based searching.